Subject: Stupid line array question number 3
Posted by Elvis on Wed, 21 Mar 2007 23:14:46 GMT
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I'm assuming that when you wire speakers in series they look like a line with the positive wired to the negative and then the negative wired to the positive etc. Groups of series and parallel look like a ladder. The bottom of the ladder are the connections to the amp: one positive, and one negative. The rungs are the groups of series wired speakers. IF my calculations say that I need 2 four speaker groups wired in parallel, then I would have 2 sets of 4 speakers in series. Each of these 2 sets would be the rungs of the ladder.My stupid question is: is the last rung, one of the two sets of 4 speakers in series, or do the sides of the ladder continue and connect with a solid wire effectively joining the positive and negative wires in one more rung above the speakers which is a solid wire, or does it not really matter?Elvis

Subject: Re: Stupid line array question number 3
Posted by Wayne Parham on Thu, 22 Mar 2007 13:58:13 GMT
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If you need two parallel blocks, and each is connected in series, this is what it would look like:

```
     (+)            |            |            |           (+)------speaker-----(-)            |                 |
(+)------speaker-----(-)            |                 |           (+)------speaker-----(-)            |                 |
           (+)------speaker-----(-)                                 |                                 |
|           (-)------speaker-----(+)            |                 |           (-)------speaker-----(+)            |
           |           (-)------speaker-----(+)            |                 |           (-)------speaker-----(+)
    |           |           |           (-)Total impedance of the array will be half the impedance of a
single driver.
```

Subject: This looks like the opposite of what I'm asking....
Posted by Elvis on Thu, 22 Mar 2007 14:16:05 GMT
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That looks like two groups each with 4 speakers in parallel, which are connected in series connected in series.I'd be talking about two groups of 4 speakers which are connected in series, and both of these groups connected in parallel

Subject: Re: Stupid line array question number 3
Posted by cfranz on Thu, 22 Mar 2007 15:20:06 GMT

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Wire the two 4-speaker series separately; Identically but separately. Each should have a + and - line back to the crossover.Yes, you could also run a from the + input to the + of each parallel group (and the same for -) but if your confused already, why bother?
Crossover
 Crossover (-)
(+) |

|(-)speaker(+)----(-)speaker(+)----(-)s
peaker(+)----(-)speaker(+) |
|(-)speaker(+)----(-)speaker(+)----(
-)speaker(+)----(-)speaker(+)

Subject: Re: This looks like the opposite of what I'm asking....
Posted by Wayne Parham on Thu, 22 Mar 2007 16:06:31 GMT
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I see. Then connect it like this: (+) | | ---------- | | s s p p k k | | | | s s p p k k | | | | s s p p k k | | | | s s p p k k | | | ---------- | | (-)Each speaker is represented by "spk" with the "s" side being positive and the "k" side being negative. The total impedance of the network is double the impedance of a single driver.

Subject: thanks
Posted by Elvis on Thu, 22 Mar 2007 23:14:27 GMT
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thanks

Subject: thanks
Posted by Elvis on Thu, 22 Mar 2007 23:15:22 GMT
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thanks

Subject: Re: Stupid line array question number 3
Posted by FredT on Fri, 23 Mar 2007 10:28:30 GMT
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It's not a stupid question at all. I've wired several arrays and I still get so confused that I use different color wiring for the positive leads (white), negative leads (black), and the leads that go from one speaker's positive terminal to the next speaker's negative (gray).See the link below for a wiring diagram of two groups of four drivers each, where the drivers in each group are series-wired, and the two groups are parallel-wired. This scheme results in an overall impedance that's twice the impedance of each individual driver.
Art Array Wiring Diagram